IN THE CLAIMS

Please amend the claims as follows:

- 1. (Cancelled)
- 2. (Currently Amended) A method of <u>presenting expressing</u> an antigenic <u>peptide</u> molecule on the surface of a viable <u>cancer</u> cell, said method comprising:

contacting said <u>cancer</u> cell with a said antigenic <u>peptide</u> molecule and with a photosensitizing agent, wherein said <u>peptide</u> molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide molecule into the cytosol of the cell, without killing the cell;

wherein, said released antigenic <u>peptide</u> molecule, or a part thereof of sufficient size to generate <u>a cytotoxic T cell response</u>an immune response, is subsequently presented on the surface of said cell by a class I or II MHC molecule;

wherein presentation of the antigenic <u>peptide</u> molecule, or part thereof, on the surface of said cell results in <u>cytotoxic T cell mediated cell killing</u> stimulation of an immune response; and

wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine, purpurin, and a chlorin, benzoporphyrin, naphthalocyanine, cationic dye, and tetracycline.

- 3. (Cancelled)
- 4. (Currently Amended) The method of claim 2, wherein the antigenic <u>peptide</u> molecule is a vaccine antigen or vaccine component.
- 5. (Cancelled)
- 6. (Cancelled)

7. (Cancelled)

- 8. **(Previously Presented)** The method of claim 2 wherein the photosensitizing agent is meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).
- 9. (Currently Amended) The method of claim 2, wherein the antigenic <u>peptide</u> molecule and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.
- 10. (**Previously Presented**) The method of claim 2, wherein said method is carried out *in vitro* or *in vivo*.
- 11-21. (Cancelled).
- 22. (Cancelled)
- 23. (Cancelled)
- 24. (Currently Amended) A method of <u>presenting expressing</u> an antigenic <u>peptide</u> molecule or a part thereof on the surface of a viable antigen presenting cell, said method comprising:

contacting said cell with the antigenic <u>peptide</u> molecule and with a photosensitizing agent, wherein said <u>peptide</u> molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide molecule into the cytosol of the cell, without killing the cell;

wherein, said released peptide molecule, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I or II MHC molecule;

wherein presentation of the peptide molecule, or part thereof, on the surface of said cell results in stimulation of an immune response; and

wherein the photosensitizing agent is selected from the group consisting of a meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

- 25. (Previously Presented) The method of claim 24, wherein the antigen presenting cell is selected from the group consisting of a lymphocyte, dendritic cell, macrophage and cancer cell.
- 26. (Currently Amended) The method of claim 24, wherein the antigenic peptide molecule and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.
- 27. (Previously Presented) The method of claim 24, wherein said method is carried out in vitro or in vivo.
- 28. (Previously Presented) The method of claim 2, wherein at least 90% of the cells are not killed.
- 29. (Previously Presented) The method of claim 2, wherein at least 95% of the cells are not killed.
- 30. (New) The method of claim 2, wherein the photosensitizing agent is a sulfonated tetraphenylporphine, a disulfonated aluminum phthalocyanine or a tetrasulfonated aluminum phthalocyanine.

- 31. (New) The method of claim 2, wherein said contacting and said irradiating steps are carried out *ex vivo*.
- 32. **(New)** The method of claim 31, further comprising administering the cells to a mammal after said irradiating step.
- 33. (New) The method of claim 24, wherein said contacting and said irradiating steps are carried out *ex vivo*.
- 34. (New) The method of claim 33, further comprising administering the cells to a mammal after said irradiating step.